Conference Abstract

Towards an Integrated Species Distribution Modelling Environment

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Abstract

The Australian Department of the Environment and Energy (DoEE) is working with the Atlas of Living Australia (ALA), Biodiversity Climate Change Virtual Laboratory (BCCVL) together with 2 state environment departments (New South Wales and Queensland) to develop a standard framework for modelling threatened species distributions for use in policy / environmental decision making.

In addition, DoEE is working with 7 state and territory environment departments to implement a common assessment method (CAM) for the assessment and listing of nationally threatened species. The method is based on the IUCN Red List criteria. Each Australian jurisdiction has traditionally used different assessment method, including categories, criteria, thresholds, definitions and scales of assessment to list threatened species within their jurisdiction. The CAM is a standardised method for species assessed for listing at the national level. Through cross-jurisdictional collaboration, this will improve the efficiency of the assessment process and facilitate consistency across jurisdictional lists.

The BCCVL includes linkages to species observations on the ALA and users are able to add their own data including contextual and species data. The project aims to create a secure environment where cross-jurisdictional collaboration can occur both on the standardisation of methodologies for creating species distributions and the integration of data. The project also aims to provide a secure platform for jurisdictions to contribute

sensitive observations not available through the ALA and take into consideration expert feedback on the distribution of species.

The project will provide a public-facing platform whereby SDM's can be published. This will be searchable by area, species or contributor. All outputs will be scientifically robust, repeatable, maintainable, open and transparent. The increased validity and robustness of models lead to better informed decisions relating to impacts of development and conservation of species.

Keywords

Species distribution modelling, integrating species observation data, collaboration

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